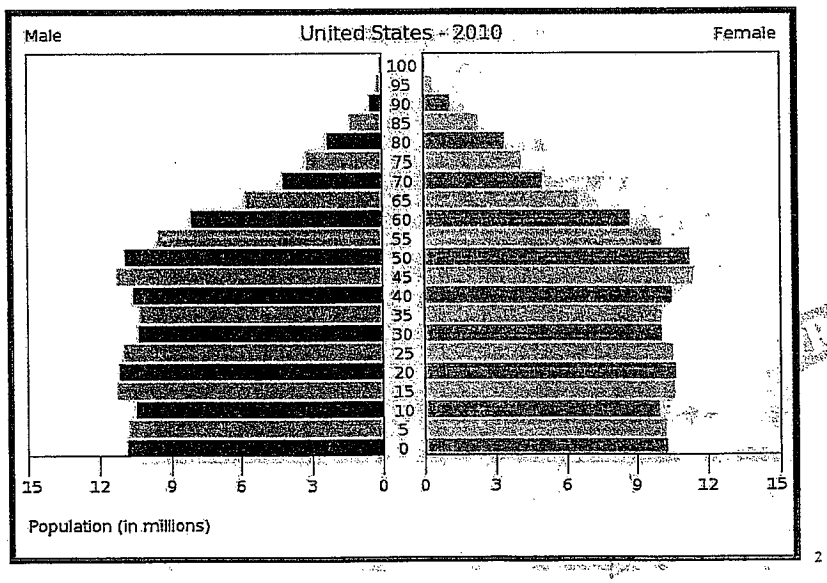
Kansas
Department on Aging

Future of Technology in Social Services

Vision 2020 Committee

Secretary Shawn Sullivan
February 1, 2012

2010 Population by Age
Americans 85+ years old = 5,751,000



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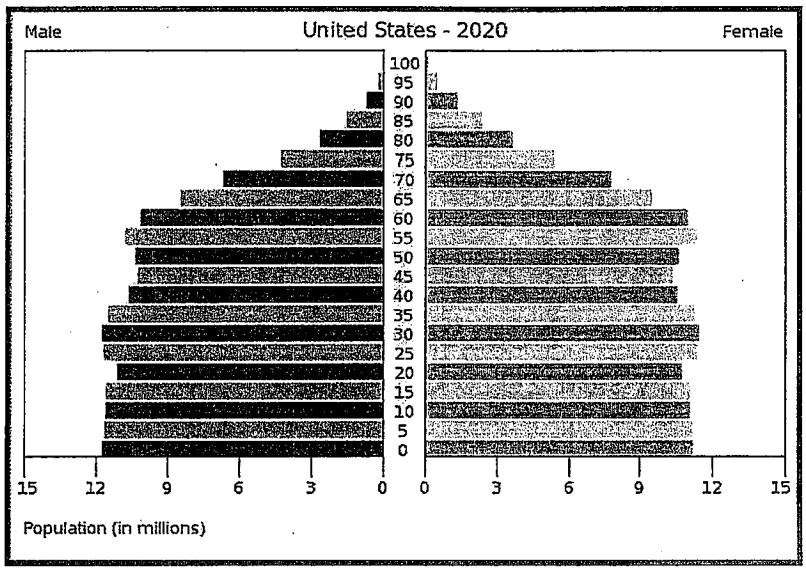
2020 Population by Age
Americans 85+ years old = 6,597,000



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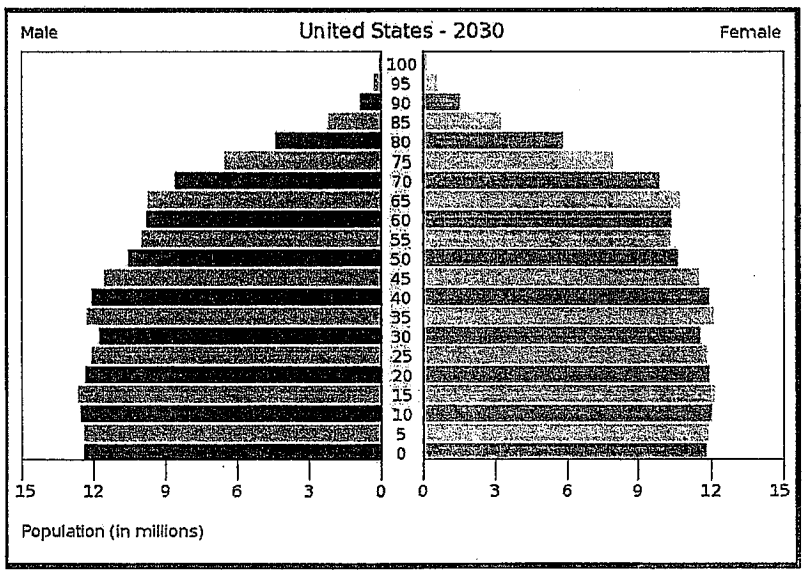
2030 Population by Age
Americans 85+ years old = 8,745,000



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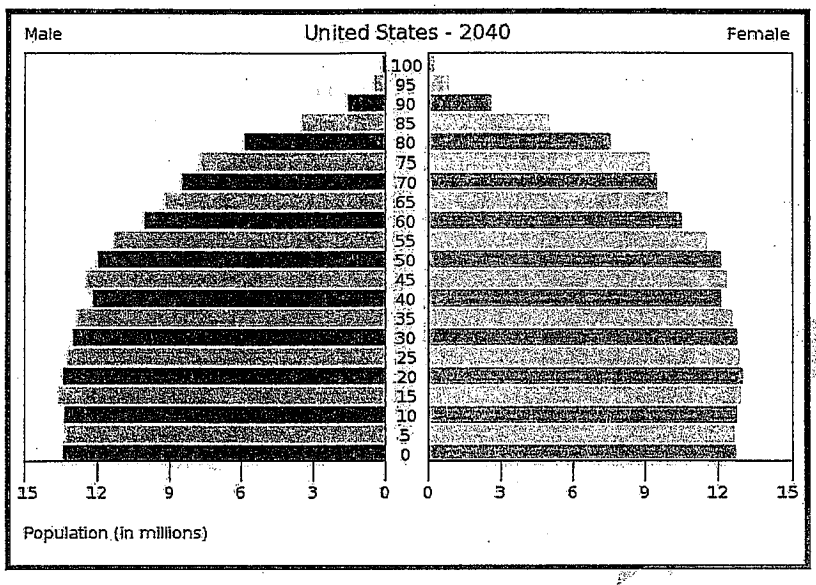
2040 Population by Age
Americans 85+ years old = 14,198,000



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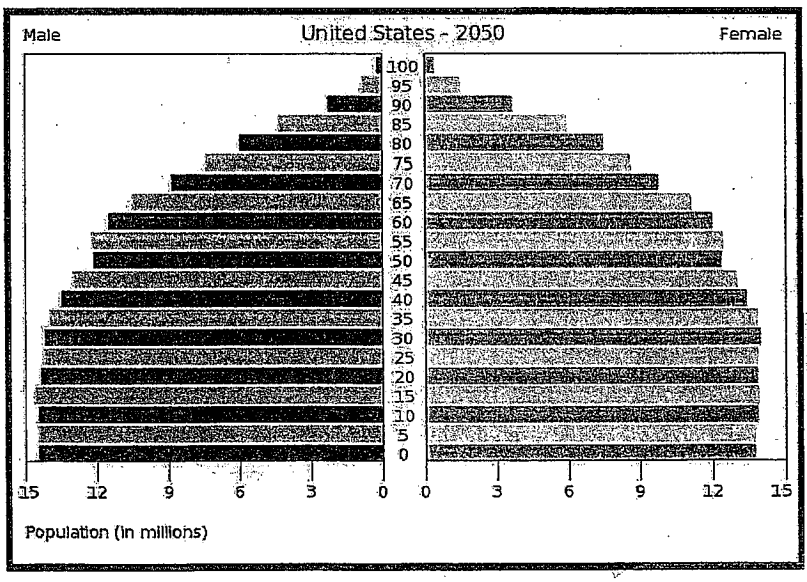
2050 Population by Age
Americans 85+ years old = 19,041,000



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Home Tele-health

- KDOA expanded program in SFY 2012.
- Currently 25 enrolled in program.
- Possibilities of expansion.

Kansas Current LTC Services

	Nursing Facilities	HCBS
Medical/ Clinical Care	RN's LPN's	VOID
ADL and Personal Care	CNA's RA's Other Staff	Attendant Care Workers Homemaker Staff
Social Needs	Activity Directors Social Workers	Companion Services (Ended December 2009)

Courtesy of Windsor at Home

Four Key Elements to Tele-health

1. Accurate physiological information
2. Shared data with patient
3. Data-driven coaching/patient education
4. Optimized provider involvement

Objective Data Collection

Courtesy of Windsor at Home

Excerpts from KUMC's Year 3 Telehealth Pilot Report

Utilization and Costs

By the end of the third year, all six original variables were statistically different between baseline and intervention periods across the three years (Table 1). These data mean that there is likely an effect of the telehealth intervention on the HCBS/FE study participants' use of health care services and the associated CMS costs.

Variable	Rate of Change	Significant Change?	p-value*
Hospital Visits	↓ by 38% per day	Yes	.0000
Hospital Days	↓ .028day/day or 10.23/year	Yes	.0014
Hospital Costs	↓ $72/day or $26,298/year	Yes	.0024
E.D. Visits	↓ by 67% per day	Yes	.0290
E.D. Costs	↓ $21.10 per day**	Yes	.0300
Total Costs	↓ $73/day or $26,663/year	Yes	.0004

Table 1: Comparison of baseline and intervention mean rates of pilot variables.
*Probability at the .05 level
*For Year 3 participants only. Year 1 and 2 participants were not different from baseline.

Excerpts from KUMC's Year 3 Telehealth Pilot Report

Participant Perceptions

HCBS/FE participants' perceptions of the intervention were positive during all three years of study.

Discussion

- The results of this home telehealth pilot project demonstrated that home telehealth intervention reduced the rate of emergency department utilization, inpatient hospitalizations and the associated Medicare costs for HCBS/FE clients. The cost savings of a hospitalization alone ($26,298 per patient annually) are substantial.
- In addition, the annual rate of nursing home placement during the three-year period was lower than the observed rate for all Kansas HCBS/FE clients. Patient perceptions of the intervention remained positive and stable over time.
- As with any pilot study, this pilot served its intended purpose of determining whether further study is warranted and what methodological issues should be revised. Specifically, this project yielded a number of positive findings that indicate the effectiveness of home telehealth for HCBS/FE clients and a number of lessons learned.

KanCare and Technology

- Utilization of technology in service delivery.
- How technology fits into giving Medicaid consumers the right care, at the right time, in a place called home.

LeadingAge Center for Aging Services Technology (CAST) Study

Found at: http://www.leadingage.org/uploadedFiles/Content/About/CAST/Resources/Preparing%20for%20the%20Future_Case%20Studies.pdf

Common Technologies

1. Infrastructure: Wireless networking technology for business and internet access; hand-held devices like iPads; area-wide networks to connect staff of multi-site organizations; and technologies designed to assist in process management
2. Safety: Personal emergency response systems, electronic call systems and fall detectors
3. Health and wellness technologies: Tele-health devices (in-home devices and kiosks in public places), medication dispensers, remote monitoring sensor technology, tele-coaching and telemedicine for rural health care.
4. Documentation: Electronic health records, quality of life measurement tools, point of care systems, clinical care tracking software
5. Social networking: Computer and internet training programs for older adults; secure social networking technologies that connect residents with family, peers and their retirement community; virtual senior center, through which homebound older adults attend events at the local senior center from the comfort of their own homes; social gaming technologies; and cognitive brain fitness software

LeadingAge Center for Aging Services Technology (CAST) Study

1. Health reform looms large
   - Organizations are establishing partnerships with hospitals to help reduce hospitalization rates
   - Establishing programs to address needs of older adults with chronic conditions
   - Ease care transitions through electronic record sharing systems
   - Remote monitoring and tele-health
   - Share health data with primary care physicians to improve care quality and reduce health care costs

2. Challenges
   - Lack of funding
   - Lack of integration
   - Internal silos
   - Lackluster private-pay market
   - Technophobia
   - Lack of infrastructure
   - Technology learning curve

3. Thinking strategically
   - Look to the future, but start today
   - Make systems change your goal
   - Use technology as a tool, not as the end in itself

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